

Claims

We claim:

- Sub A17 5
- 10 1. A composition comprising an antibody specific for a soluble antigen of a *C. parvum* sporozoite.
- 15 2. The composition of claim 1 wherein the antibody is a monoclonal antibody.
3. The composition of claim 1 wherein the antibody exhibits minimal crossreactivity with *C. parvum* oocyst proteins or peptides.
- 20 4. The composition of claim 1 wherein the antibody exhibits minimal crossreactivity with other *Cryptosporidium* species.
5. The composition of claim 1 wherein the antibody is the antibody deposited with the ATCC as CRL-12604.
- 25 6. A method for the detection of *C. parvum* in a sample comprising incubating an antibody specific for a soluble antigen of a *C. parvum* sporozoite with the sample and detecting the binding of the antibody to the soluble antigen of a *C. parvum* sporozoite in the sample, wherein the detection of binding indicates the presence of *C. parvum* in the sample.
- 30 7. The method of claim 6 wherein the sample is treated to excyst *C. parvum* oocysts to release sporozoite antigen.
- 35 8. The method of claim 6 wherein the sample is a water sample.

9. The method of claim 6 wherein the sample is a biological fluid.

5 10. The method of claim 6 wherein the method is an immunoassay.

11. The method of claim 6 having a detection sensitivity of less than 200 oocysts per milliliter.

10 12. The method of claim 6 having a detection sensitivity of less than 100 oocysts per milliliter.

15 13. The method of claim 6 wherein the sample has a high turbidity.

20 14. The method of claim 6 wherein the sample is treated by a biological mechanism to cause excystation of *C. parvum* oocysts in the sample, thereby releasing sporozoites from viable oocysts in the sample.

25 15. The method of claim 6 wherein the sample is treated by mechanical disruption, thereby releasing sporozoites from viable and non-viable oocysts in the sample.

16. The method of claim 6 wherein the antibody is the antibody deposited with the ATCC as CRL-12604.

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